Listing of Claims

This listing of claims replaces all prior versions and listings of claims in the application:

1.   (Previously Presented) A method comprising:

sending a data packet along a path from a first network point to a second network point;

along the path, generating fragment packets from the data packet;

receiving at least one of the fragment packets at the second network point;

analyzing the size of at least one of the received fragment packets and comparing the size to a maximum packet size; and

depending on a result of the analysis, re-setting the maximum packet size based on the size of the at least one of the fragment packets.

2.   (Previously Presented) The method of claim 1 also including re-setting the maximum packet size to equal the size of one of the fragment packets.

3.   (Previously Presented) The method of claim 1 also including communicating the reset maximum packet size to the first network point.

4.   (Previously Presented)   The method of claim 1 also including communicating the reset maximum packet size from the second network point.

5.   (Previously Presented)   The method of claim 3 also including refraining from communicating the reset maximum packet size unless the maximum packet size of the path has changed.

6.   (Original)   The method of claim 1 also including storing the maximum packet size.

7.   (Original)   The method of claim 1 also including refraining from changing the maximum packet size if the fragment analyzed comprises the final fragment of the data packet.

8.   (Original)   The method of claim 1 in which the data packet that is sent along the path is of the largest size allowed by the network technology at the first point.

9.   (Original)   The method of claim 8 also including periodically repeating the sending, generating, analyzing, and resetting.

10. (Previously Presented)   A method comprising:

storing a maximum packet size of a network path from a sending point to the receiving point;

receiving, at the receiving point, a collection of fragments of a data packet transmitted over the network path, wherein the data packet is fragmented along the network path;

determining a size of a largest fragment of the data packet transmitted over the network path;

comparing the size of the largest fragment of the data packet to the maximum packet size; and

resetting the maximum data packet size of the network path based on the determined size of the largest fragment of the data packet transmitted over the network path.

11. (Original) The method of claim 10 also including communicating the maximum data packet size to the sending point.

12. (Original) The method of claim 11 also including sending a message of the size of the maximum data packet size from the sending point to the receiving point.

13. (Previously Presented) The method of claim 10, further comprising sending the data packet from the sending point to the receiving point.

14. (Canceled)

15. (Canceled)

16. (Previously Presented) The method of claim 10 also including reporting the maximum packet size to the sending point.

17. (Previously Presented) A method comprising:

sending a data message along a network path from a sending point to a receiving point, wherein a size of the data message is larger than a path maximum transfer unit and the data message is fragmented along the network path;

determining a size of a largest fragment of the data message at the receiving point; and

based on the determination, setting a maximum packet size between sending and receiving points.

18. (Previously Presented) The method of claim 17 also including:

fragmenting the data message if its size exceeds a maximum packet size; and

optimizing communication based on the determination.

19. (Original) The method of claim 18, also including periodically sending a test data message.

20. (Original) The method of claim 19, in which the test message is larger than the maximum packet size.

21. (Previously Presented) A method for determining a maximum packet size of a network path, the method comprising:

sending a data packet along the network path to a receiving node;

receiving a response from the receiving node, the response including information determined based on a size of a fragment of the data packet, the fragment formed along the network path; and

setting the maximum packet size of the network path based on the response.

22. (Canceled)

23. (Original) The method of claim 21, also including fragmenting the packet into fragments.

24. (Original) The method of claim 21, also including comparing the size of a fragment to a predetermined maximum packet size.

25. (Original) The method of claim 21, also including sending the maximum packet size to a sending point on the network path.

26. (Original) The method of claim 25, also including generating packets at the sending point, the packets at least as small as the maximum packet size.

27. (Previously Presented)   A method comprising:

sending a data packet on a path from a first network point to a second network point;

along the path, generating fragment packets from the data packet;

receiving at least one of the fragment packets at the second network point; and

analyzing a size of at least one of the received fragment packets to determine a path maximum packet size.

28. (Original)   The method of claim 27 also including comparing the size of the fragment to a predetermined maximum packet size.

29. (Original)   The method of claim 28 also including resetting the predetermined maximum packet size to equal the size of the fragment.

30. (Original)   The method of claim 27 also including, based on the comparison, choosing an optimal packet size for packets sending packets from the first to the second network points.

31. (Canceled)

32. (Previously Presented) A method comprising:

sending a data packet along a network path, the data packet being larger than a maximum packet size of the network path;

fragmenting the packet into fragments;

receiving at least one of the fragments at a second network point; and

analyzing the size of one or more of the received fragments to determine the maximum packet size of the path.

33. (Previously Presented) A method comprising:

sending a message along a network path, the path including sections, each of the sections having a maximum message size to limit the size of messages passing through it, the message being larger than the smallest maximum message size of the sections;

fragmenting the message into fragments, the fragments being at least as small as the smallest maximum message size;

at a receiving point, measuring the size of the largest fragment; and

communicating the size of the largest fragment to a sending point.

34. (Canceled)

35. (Previously Presented) The method of claim 33 also including comparing the size of the largest fragment to a pre-determined maximum message size.

36.   (Currently Amended) A computer readable medium <u>having</u> embodied therein a computer program, the computer program capable of:

~~send~~ <u>sending</u> a data packet along a path from a first network point to a second network point;

along the path, ~~generate~~ <u>generating</u> fragment packets from the data packet;

~~analyze~~ <u>analyzing</u> the size of at least one of the fragment packets; and

depending on a result of the analysis, ~~re-set~~ <u>re-setting</u> a maximum packet size based on the size of the one of the fragment packets.

37.   (Currently Amended) The computer readable medium of claim 36, wherein the computer program <u>is</u> also capable of configuring a computer to communicate the new maximum packet size to the first network point.

Claims 38.-40. (Canceled)